CLAIMS

1. A method for two-dimensional evaluation of the nature of horny layer oxidized protein on a horny layer, the method being characterized by comprising the steps of specific fluorescent labeling of the carbonyl groups of said oxidized protein in a horny layer specimen taken from skin, and detection of the fluorescence for evaluation.

2. A method according to claim 1, wherein said detection is carried out under a fluorescent microscope, and the detection results obtained therefrom are imaged.

3. A method according to claim 1 or 2, wherein the specific fluorescent labeling of the carbonyl groups of said oxidized protein is accomplished by reacting and binding a hydrazino group-containing fluorescent substance to said oxidized protein.

4. A method according to any one of claims 1 to 3, wherein said horny layer specimen is a tape horny layer obtained by tape stripping against the skin.

5. A kit to be used in a method for two-dimensional evaluation of the presence of horny layer oxidized protein on a horny layer, the kit being characterized by comprising

adhesive tape for sampling of a horny layer specimen by tape stripping, and

a fluorescent substance for specific fluorescent labeling of the carbonyl groups of the oxidized protein.

6. A kit according to claim 5, wherein said evaluation is carried out under a fluorescent microscope, and the detection results obtained therefrom are imaged.

7. A kit according to claim 5 or 6, wherein said fluorescent substance is a hydrazino group-containing fluorescent substance, and the specific fluorescent labeling of the carbonyl groups of said oxidized protein is accomplished by reacting and binding a hydrazino group-containing fluorescent substance to said oxidized

protein.

8. A screening method for agents which inhibit oxidized protein increase, the method being characterized by comprising the steps of treating a horny layer with an appropriate oxidizing agent and candidate agent, and then accomplishing specific fluorescent labeling of the carbonyl groups of the oxidized protein on the horny layer and detecting the fluorescence to evaluate the activity of said agent for inhibiting oxidized protein increase.

9. A method according to claim 8, wherein the specific fluorescent labeling of the carbonyl groups of said oxidized protein is accomplished by reacting and binding a hydrazino group-containing fluorescent substance to said oxidized protein.

10. A method for detecting the oxidized form of a cornified envelope consisting of the water-insoluble substances in a skin-derived horny layer specimen, the method being characterized by specific fluorescent labeling of the carbonyl groups in a cornified envelope in said oxidized form and detection of the fluorescence thereof for evaluation.

11. A method according to claim 10, wherein the specific fluorescent labeling of the carbonyl groups of the cornified envelope in said oxidized form is accomplished by reacting and binding a hydrazino group-containing fluorescent substance to the cornified envelope in said oxidized form.

12. A method according to claim 10 or 11, which further comprises detection by staining of the hydrophobic regions of said cornified envelope with a dye capable of selective staining, and/or detection of the antigenicity of said cornified envelope.

13. A method according to claim 12, wherein said antigenicity is detected using anti-human involucrin antibody.

14. A method according to any one of claims 9 to

13, wherein said detection is accomplished using a fluorescent microscope.